

Claims

1. An anastomotic device, comprising a woven tube of at least one wire strand, the woven tube having each longitudinal end terminate in circumferential petals, the woven tube having an unactuated position of a generally cylindrical shape and an actuated position of a hollow rivet shape respectively for insertion through and for forming an anastomotic attachment between two proximate tissue walls at an anastomotic surgical site, wherein each of the at least one wire strand includes unattached ends.
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2. The anastomotic device of claim 1, wherein at least one unattached end of at least one wire strand terminates in a ball.
3. The anastomotic device of claim 1, wherein at least one unattached end of at least one wire strand terminates in loop.
4. The anastomotic device of claim 1, wherein at least one unattached end of at least one wire strand terminates in a hook registered to engage a tissue wall of the anastomotic surgical site when the woven tube is in an actuated position.

5. An anastomotic device, comprising:
 - a woven tube of at least one wire strand, the woven tube having each longitudinal end terminate in circumferential petals, the woven tube having an unactuated position of a generally cylindrical shape and an actuated position of a hollow rivet shape respectively
 - 5 for insertion through and for forming an anastomotic attachment between two proximate tissue walls at an anastomotic surgical site, and
 - a helical spring coupled to the woven tube for imparting an actuating force thereto to urge the woven tube from the unactuated to the actuated position.
6. The anastomotic device of claim 5, wherein the helical spring comprises a spring steel strand formed into a helical shape.
7. The anastomotic device of claim 5, wherein the helical spring compresses a Shape Memory Effect material.
8. The anastomotic device of claim 5, wherein the woven tube comprises a longitudinally cut segment of a continuous woven cylindrical tube.
9. The anastomotic device of claim 5 wherein the woven tube comprises a Shape Memory Effect material.

10. An anastomotic device, comprising a woven tube of at least one wire strand, the woven tube having each longitudinal end terminate in circumferential petals, the woven tube having an unactuated position of a generally cylindrical shape and an actuated position of a hollow rivet shape respectively for insertion through and for forming an anastomotic attachment between two proximate tissue walls at an anastomotic surgical site, an underlying portion of each petal presenting a monotonic slope to an overlying portion of an adjacent petal for mitigating resistance to actuation.

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11. The anastomotic device of claim 10, wherein a distal portion of each petal comprises a radially narrowed elongate distal portion and a radially diverging proximal portion.

12. The anastomotic device of claim 10, further comprising a helical spring coupled to the woven tube for imparting an actuating force thereto to urge the woven tube from the unactuated to the actuated position.

13. The anastomotic device of claim 12, wherein the helical spring comprises a spring steel strand formed into a helical shape.

14. The anastomotic device of claim 12, wherein the helical spring compresses a Shape Memory Effect material. wherein each of the at least one wire strand includes unattached ends.

15. The anastomotic device of claim 10, wherein the woven tube comprises at least one strand having unattached ends.

16. The anastomotic device of claim 15 wherein the unattached ends each terminate in a ball.

17. The anastomotic device of claim 15, wherein the unattached ends each terminate in a loop.

18. The anastomotic device of claim 10, wherein at least one unattached end of at least one wire strand terminates in a hook registered to engage a tissue wall of the anastomotic surgical site when the woven tube is in an actuated position.